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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,160	08/30/2001	Stiven A. Farquhar	9099.00	8616

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EXAMINER

PAIK, STEVE S

ART UNIT	PAPER NUMBER
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2876

DATE MAILED: 05/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/943,160

Applicant(s)

FARQUHAR, STIVEN A.

Examiner

Steven S. Paik

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Receipt is acknowledged of the Amendment filed March 05, 2003.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 27-34, 36-39, and 41-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohwa et al. (US 5,850,079).

Re claims 27, 28, 30, 37, 38, Ohwa et al. discloses a card reader with a foreign matter detection mechanism comprising:

a throat portion (card insertion portion 3a in Fig. 2) for receiving cards (2);

a housing portion (card reader main device A) for containing a card read head (15 in Fig. 2 or 110 in Fig. 14);

a shutter arm (4) movable from a closed position to an open position to allow the card (2) to pass from the throat portion (3a) to the housing portion (A); and

a sweeping arm (59, 52-54 in Fig. 21 and col. 9, ll. 5-10) movable from one side of the throat (103a) portion to an opposite side of the throat portion (left to right or right to left) to detect any non-card obstruction in the throat portion (103a). The sweeping arm 59 scans the entire width of the throat portion 103a and the driving path 103b shown as two-dots broken line in Fig. 21. The sweeping arm comprises a thin wire, a support plate 52 and detectors 53 and 54

Art Unit: 2876

which is comprised of micro switches (col. 9, ll. 5-19). The sweeping mechanism shown in Fig. 21 is disposed between the throat portion (103a) and the housing portion (A).

The primary object of Ohwa's invention is to detect foreign matters such as a thin wire, a film, or the like inserted within a card reader to prevent card theft. Thus, his invention comprises a shutter for preventing foreign matter insertion and the like, a detection means for determining a condition of the shutter during a card reading operation and for providing an output signal of the determination and means responsive to the output signal for indicating that the shutter is an improper condition when foreign matter is inserted in the driving path (col. 1, ll. 32-45). The sweeping arm is disposed between the throat portion 103a and the housing portion (card reader main device A).

Re claim 29, Ohwa et al. discloses the reader as recited in rejected claim 27 stated above, further comprising card width switch including a card width switch arm (detection lever 5) pivotable from an undeflected position to a deflected position (col. 3, ll. 42-50 and ll. 60+) when a card (2) is received in the throat portion (3a), and means for detecting when the card width switch arm is in the deflected position to indicate a card received in the throat portion (col. 4, ll. 1-11).

Re claims 31-34, and 39, Ohwa et al. discloses the reader as recited in rejected claim 30 stated above, where the sweeping arm includes a leading edge (the edge of scan member 59 facing the moving direction in accordance with the rotary shaft 48) and a hook portion disposed on the leading edge (see C in Fig. 21). The pair of detectors 53 and 54 detects the movement of the scan member traversing the entire width of the throat portion. When a foreign matter is detected by the detectors, it is cut by the cutter blade in a case the foreign matter is thin or soft.

Art Unit: 2876

The cutting blade is included as a part of the sweeping arm function and communicates with the detectors closely.

Re claim 36, Ohwa et al. discloses the reader as recited in rejected claim 31 stated above, where the arm includes a hook portion (Figs. 4-6 and 11) on a leading edge and the hook portion is resiliently biased so that the hook portion may be deflected by (col. 4, lines 5-12) the card (2).

Re claim 41, Ohwa et al. discloses a self-service terminal (ATM) with a theft counter measure and a method of operating a motorized card reader module comprising:

a fascia defining a card entry/exit slot (a slot covers a card insertion portion 3a of a card reader in Fig. 2); and

a motorized card reader module (col. 6, line 65) in registration with the card entry/exit slot (103a), a housing portion (card reader main device A) for containing a card read head(15), a shutter member (4) movable from a closed position to an open position to allow card to pass between the card entry/exit slot (103a and 103b) and the housing porting, and a sweeping member (Fig 21) movable from one side of the card entry/exit slot (103a) to an opposite side of the card entry/exit slot to detect any non-card obstruction in the card entry/exit slot (col. 9, ll. 5-19).

Re claims 42 and 43, Ohwa et al. discloses the reader as recited in rejected claim 41 stated above, where the sweeping arm includes a leading edge (the edge of scan member 59 facing the moving direction in accordance with the rotary shaft 48) and a hook portion disposed on the leading edge (see C in Fig. 21). The pair of detectors 53 and 54 detects the movement of the scan member traversing the entire width of the throat portion. When a foreign matter is

Art Unit: 2876

detected by the detectors, it is cut by the cutter blade in a case the foreign matter is thin or soft. The cutting blade is included as a part of the sweeping arm function and communicates with the detectors closely.

Re claims 44 and 45, Ohwa et al. discloses a self-service terminal (ATM) with a theft counter measure and a method of operating a motorized card reader module comprising the steps of:

receiving a card (2) in a throat portion (3a) of the motorized card reader module;

opening a shutter member (4) to allow (the shutter member further comprises a plurality of detectors to detect an opening and a closing condition, see col. 2, ll. 65+ and col. 341-50) a card to move from the throat portion into a housing portion (card reader main device A) of the motorized card reader module;

driving a sweeping member (Fig. 21) from one side of the throat portion to an opposite side of the throat portion to detect a non-card obstruction in the throat portion (col. 9, ll. 5-19);

monitoring the sweeping member to detect if the sweeping member reaches both sides of the throat portion (by the detectors 53 and 54 in Fig. 21); and

activating an alert signal in response to detecting a failure of the sweeping member to reach both sides of the throat portion (when a foreign matter is detected, then the scan member 59 would not scan the entire width of the card path and an alarm goes off, see col. 9, ll. 24-42).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject

Art Unit: 2876

matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 35 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohwa et al. (US 5,850,079).

The teachings of Ohwa et al. have been discussed above. Although, Ohwa et al. discloses a plurality of detection signals (col. 3, line 63) sensed by detect section 5a, he does not specifically teach that the signal is detecting the state of the cutting mechanism.

However, it is obvious to include such a signal to enhance the function of the cutting mechanism to prevent a crime of fraudulent usages of a card (col. 4, lines 35-38). Ohwa et al. teaches that a trap member can be cut if soft or thin and if it is too hard or thick to be cut, the detector detects that the plate shutter is not closed. The above teaches that there is a sensor or the like to detect or measure the size of a trap member and whether the trap member can be cut or not.

Thus, it would have been obvious at the time of the invention was made to a person having ordinary skills in the art to incorporate the detecting mechanism to include a sensing signal to output the state of the cutting mechanism as one of the plurality of detected signal for the purpose of preventing fraudulent activities involving a card reader. Since the card reader of Ohwa et al. is already designed to produce a plurality of detection signals, incorporating such modification of detecting the status of a cutting mechanism to protect cutting blade would be obvious matter of design variations, well within the ordinary skill in the art, therefore an obvious expedient.

Art Unit: 2876

Response to Arguments

6. Applicant's arguments filed on March 5, 2003 have been fully considered but they are not persuasive.

In response to the Office Action (Paper No. 4), the applicant cancelled claims 1-26 and added new claims 27-45. The newly added claims have been rejected under 35 U.S.C. §102 (b) and 103(a) by previously cited reference Ohwa et al. (US 5,850,079).

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven S. Paik whose telephone number is 703-308-6190. The examiner can normally be reached on Mon - Fri (7:00am-3:30pm).

Art Unit: 2876

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 703-305-3503. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0530.

Steven Paik

Steven S. Paik
Examiner
Art Unit 2876

ssp
May 8, 2003


MICHAEL G. LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800